

**COMBINED DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

This declaration is of the following type:

- ☒ original
- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part

**INVENTORSHIP IDENTIFICATION**

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**TITLE OF INVENTION**

ELECTRON BEAM LITHOGRAPHY SYSTEM HAVING IMPROVED ELECTRON GUN

**SPECIFICATION IDENTIFICATION**

The specification of which:

- ☐ is attached hereto
- ☒ was filed on **January 22, 2002**, under Serial No. **10/055,869**, executed on even date herewith;  
or
- ☐ Express Mail No. @ (as Serial No. not yet known)  
and was amended on \_\_\_\_\_ (if applicable)
- ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_.

**ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

- ☐ In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

**PRIORITY CLAIM (35 U.S.C. §119)**

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any provisional or any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

☐ No such applications have been filed.

☒ Such applications have been filed as follows:

- A. Prior foreign/PCT application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. §119

<u>Country/PCT</u>	<u>Application No</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

- B. All foreign application(s), if any, filed more than 12 mos. (6 mos for design) prior to this U.S. application

Country:  
Application No:  
Filing date:

- C. US Provisional applications filed within 12 months prior to this U.S. Application

Application No: 06/265,272  
Filing date: January 31, 2001

**PRIORITY CLAIM (35 U.S.C. §120)**

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

☒ No such applications have been filed  
☐ Such applications have been filed, as follows:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Status</u>
		<u>Patented Pending</u> <u>Abandoned</u>

## POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa	Registration No. 25,610
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Michael B. Einschlag	Registration No. 29,301
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Joseph Bach	Registration No. 37,771
Robert W. Mulcahy	Registration No. 25,436
Walter Benjamin Glenn	Registration No. 44,713
Greg Leitich	Registration No. 39,745

### Send correspondence to:

Patent Counsel, MS/2061  
Legal Affairs Dept.  
Applied Materials, Inc.  
P. O. Box 450A  
Santa Clara, CA 95052.


### Direct telephone calls to:

Greg Leitich  
512-469-0063

## DECLARATION

*I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.*

Full name of sole or first inventor: Andres Fernandez

Inventor's signature:  Date: 4/26/02  
Residence: United States  
Post Office Address: 6522-C Cottonwood Circle  
Dublin, CA 94568

Country of Citizenship: U.S.A.

Full name of second inventor: Marian Mankos

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: United States  
Post Office Address: 333 Presidio Ave #3  
San Francisco, CA 94115

Country of Citizenship: Czech Republic

Full name of **third** inventor: Jeffrey S. Sullivan

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 2321 Webster Street  
Berkeley, CA 94705

Country of Citizenship: U.S.A

Full name of **fourth** inventor: Paul C. Allen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 10500 SW 16 Ct.  
Beaverton, OR 97007

Country of Citizenship: U.S.A.

**(Declaration ends with this page)**

**COMBINED DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

This declaration is of the following type:

- ☒ original
- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part

**INVENTORSHIP IDENTIFICATION**

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**TITLE OF INVENTION**

ELECTRON BEAM LITHOGRAPHY SYSTEM HAVING IMPROVED ELECTRON GUN

**SPECIFICATION IDENTIFICATION**

The specification of which:

- ☐ is attached hereto
- ☒ was filed on **January 22, 2002**, under Serial No. **10/055,869**, executed on even date herewith;  
or
- ☐ Express Mail No. @ (as Serial No. not yet known)  
and was amended on \_\_\_\_\_ (if applicable)
- ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_.

**ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

- ☐ In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

# **PRIORITY CLAIM (35 U.S.C. §119)**

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any provisional or any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

☐ No such applications have been filed.

☒ Such applications have been filed as follows:

- A. Prior foreign/PCT application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. §119

<u>Country/PCT</u>	<u>Application No</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

- B. All foreign application(s), if any, filed more than 12 mos. (6 mos for design) prior to this U.S. application

Country:

Application No:

Filing date:

- C. US Provisional applications filed within 12 months prior to this U.S. Application

Application No: 60/062,652,272

Filing date: January 31, 2001

# **PRIORITY CLAIM (35 U.S.C. §120)**

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

☒ No such applications have been filed

☐ Such applications have been filed, as follows:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Status</u>
		<u>Patented Pending</u> <u>Abandoned</u>

### POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa	Registration No. 25,610
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Michael B. Einschlag	Registration No. 29,301
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Joseph Bach	Registration No. 37,771
Robert W. Mulcahy	Registration No. 25,436
Walter Benjamin Glenn	Registration No. 44,713
Greg Leitich	Registration No. 39,745

**Send correspondence to:**

Patent Counsel, MS/2061  
Legal Affairs Dept.  
Applied Materials, Inc.  
P. O. Box 450A  
Santa Clara, CA 95052.

**Direct telephone calls to:**

Greg Leitich  
512-469-0063

### DECLARATION

*I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.*

Full name of sole or first inventor: Andres Fernandez

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 6522-C Cottonwood Circle  
Dublin, CA 94568

Country of Citizenship: U.S.A.

Full name of second inventor: Marian Mankos

Inventor's signature:  \_\_\_\_\_ Date: 5/16/02

Residence: United States

Post Office Address: 333 Presidio Ave #3  
San Francisco, CA 94115

Country of Citizenship: Czech Republic

Full name of **third** inventor: Jeffrey S. Sullivan

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 2321 Webster Street  
Berkeley, CA 94705

Country of Citizenship: U.S.A

Full name of **fourth** inventor: Paul C. Allen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 10500 SW 16 Ct.  
Beaverton, OR 97007

Country of Citizenship: U.S.A.

**(Declaration ends with this page)**



**COMBINED DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

This declaration is of the following type:

- ☒ original
- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part

**INVENTORSHIP IDENTIFICATION**

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**TITLE OF INVENTION**

ELECTRON BEAM LITHOGRAPHY SYSTEM HAVING IMPROVED ELECTRON GUN

**SPECIFICATION IDENTIFICATION**

The specification of which:

- ☐ is attached hereto
- ☒ was filed on **January 22, 2002**, under Serial No. **10/055,869**, executed on even date herewith;  
or
- ☐ Express Mail No. @ (as Serial No. not yet known)  
and was amended on \_\_\_\_\_ (if applicable)
- ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_.

**ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

- ☐ In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

**PRIORITY CLAIM (35 U.S.C. §119)**

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any provisional or any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

☐ No such applications have been filed.

☒ Such applications have been filed as follows:

- A. Prior foreign/PCT application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. §119

<u>Country/PCT</u>	<u>Application No</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

- B. All foreign application(s), if any, filed more than 12 mos. (6 mos for design) prior to this U.S. application

Country:  
Application No:  
Filing date:

- C. US Provisional applications filed within 12 months prior to this U.S. Application

Application No: 06/265,272  
Filing date: January 31, 2001

**PRIORITY CLAIM (35 U.S.C. §120)**

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

☒ No such applications have been filed

☐ Such applications have been filed, as follows:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Status</u>
		<u>Patented Pending</u> <u>Abandoned</u>

### POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa	Registration No. 25,610
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Michael B. Einschlag	Registration No. 29,301
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Joseph Bach	Registration No. 37,771
Robert W. Mulcahy	Registration No. 25,436
Walter Benjamin Glenn	Registration No. 44,713
Greg Leitich	Registration No. 39,745

**Send correspondence to:**

Patent Counsel, MS/2061  
Legal Affairs Dept.  
Applied Materials, Inc.  
P. O. Box 450A  
Santa Clara, CA 95052.

**Direct telephone calls to:**

Greg Leitich  
512-469-0063

### DECLARATION

*I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.*

Full name of sole or first inventor: Andres Fernandez

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 6522-C Cottonwood Circle  
Dublin, CA 94568

Country of Citizenship: U.S.A.

Full name of second inventor: Marian Mankos

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 333 Presidio Ave #3  
San Francisco, CA 94115

Country of Citizenship: Czech Republic

Full name of **third** inventor: Jeffrey S. Sullivan

Inventor's signature:  Date: 4/23/02

Residence: United States

Post Office Address: 2321 Webster Street  
Berkeley, CA 94705

Country of Citizenship: U.S.A

Full name of **fourth** inventor: Paul C. Allen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 10500 SW 16 Ct.  
Beaverton, OR 97007

Country of Citizenship: U.S.A.

(Declaration ends with this page)

**COMBINED DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

This declaration is of the following type:

- ☒ original
- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part

**INVENTORSHIP IDENTIFICATION**

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**TITLE OF INVENTION**

ELECTRON BEAM LITHOGRAPHY SYSTEM HAVING IMPROVED ELECTRON GUN

**SPECIFICATION IDENTIFICATION**

The specification of which:

- ☐ is attached hereto
- ☒ was filed on **January 22, 2002**, under Serial No. **10/055,869**, executed on even date herewith;  
or
- ☐ Express Mail No. @ (as Serial No. not yet known)  
and was amended on \_\_\_\_\_ (if applicable)
- ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_.

**ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

- ☐ In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

PRIORITY CLAIM (35 U.S.C. §119)

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any provisional or any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

☐ No such applications have been filed.

☒ Such applications have been filed as follows:

- A. Prior foreign/PCT application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. §119

<u>Country/PCT</u>	<u>Application No</u>	<u>Date Filed</u>	<u>Priority Claimed</u>
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

- B. All foreign application(s), if any, filed more than 12 mos. (6 mos for design) prior to this U.S. application

Country:  
Application No:  
Filing date:

- C. US Provisional applications filed within 12 months prior to this U.S. Application

Application No: 66 06/265,272  
Filing date: January 31, 2001

PRIORITY CLAIM (35 U.S.C. §120)

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

☒ No such applications have been filed  
☐ Such applications have been filed, as follows:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Status</u>
		<u>Patented Pending</u> <u>Abandoned</u>

## POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa	Registration No. 25,610
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Michael B. Einschlag	Registration No. 29,301
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Joseph Bach	Registration No. 37,771
Robert W. Mulcahy	Registration No. 25,436
Walter Benjamin Glenn	Registration No. 44,713
Greg Leitich	Registration No. 39,745

### Send correspondence to:

Patent Counsel, MS/2061  
Legal Affairs Dept.  
Applied Materials, Inc.  
P. O. Box 450A  
Santa Clara, CA 95052.

### Direct telephone calls to:

Greg Leitich  
512-469-0063

## DECLARATION

*I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.*

Full name of sole or first inventor: Andres Fernandez

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 6522-C Cottonwood Circle  
Dublin, CA 94568

Country of Citizenship: U.S.A.

Full name of second inventor: Marian Mankos

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 333 Presidio Ave #3  
San Francisco, CA 94115

Country of Citizenship: Czech Republic

Full name of third inventor: Jeffrey S. Sullivan

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: United States

Post Office Address: 2321 Webster Street  
Berkeley, CA 94705

Country of Citizenship: U.S.A

Full name of fourth inventor: Paul C. Allen

Inventor's signature: Paul C. Allen Date: April 29, 2002

Residence: United States PCA

Post Office Address: 10500 SW 161 Ct.  
Beaverton, OR 97007

Country of Citizenship: U.S.A.

(Declaration ends with this page)